

# PLATFORM PROTO-FEDERATION STATUS

AMG-9  
01/25/96

# FEDERATES IN THE PLATFORM PROTO-FEDERATION (PPF)

Federate	Technical POC	Organization	Phone	E - Mail
BDS-D MI Simulator	Mikel Petty	IST	(407)658-5022	mpetty@ist.ucf.edu
BFTT System	Roger Goolsby	NSWC PHD ECO	(804)433-6461	rgoolsby@hercules.nswses.navy.mil
	Stan Young	ARL:UT	(512)835-3688	syoung@arlut.utexas.edu
CCTT SAF	Peter Berggren	SAIC	(603)536-5319	
JTCTS Virtual Prototype	Paul Rattey	Raytheon	(401)842-4128	ratteyp@ccmail.ssd.ray.com

## PPF FEDERATE STATUS

### OVERALL:

- SOMs Completed
- Participated in FOM development
- Attended AMG, PPF and WG meetings
- Attended ORBIX training
- RTI v0.2 implementation and self federate testing 28 Apr
- RTI v0.3 implementation and self federate testing 31 May
- Federation testing via DSI:
  - Partial testing with RTI v0.2:
    - 18-29 March (Test Federates)
    - 29 Apr-10 May (Federates)
  - Full federation testing with RTI v0.3: 3-28 Jun
    - Performance
    - Stress
    - Ownership Transfer
    - Fast Movers
    - Connectivity

## **PPF FEDERATE STATUS**

Overall (Cont'd):

- 2 of 4 federates do not have RTI software on target platforms
- Common Software v0.1 to be released 31 Jan
  - Working with Middleware Task Group
- PPF Test Plan being updated
- Next PPF meeting scheduled for 28-29 Feb

## **PPF FEDERATE STATUS**

### **BDS-D**

- Contract Award anticipated 31 Jan 96
- S/W Design of translator has begun
- Implementing in C++ on SGI Indy
- Will participate in partial and full federation testing

## **PPF FEDERATE STATUS**

BFTT

- System configuration identified
- Processor card added to VME enclosure for RTI interface
- CC/NI module in VME currently is DIS compliant; will be updated to incorporate HLA/RTI
- HP port required by 29 Feb to complete schedule
- Difficulty with RTI v0.1 test federate on Solaris
- Will participate in partial and full federation testing

## **PPF FEDERATE STATUS**

### **CCTT**

- Currently working CCTT/HLA architecture design
- Working on hardware logistics
- RTI v0.1 test federate running on SGI
- Modifying CCTT software architecture by replacing DIS network process with RTI network process
- Will support backward compatibility with DIS for SAF only
- Assume RTI v0.2 available by 1 Mar on IBM RISC6000 (Model 43p) using Rockwell FDDI card
- Will participate in partial and full federation testing

## **PPF FEDERATE STATUS**

### **JTCTS**

- RTI v0.1 installed and tested with two test federates
- Spiral Software design development in progress (3 builds)
- Will participate in partial and full federation testing



## PPF LESSONS LEARNED TO DATE

### Technical Minefields:

- Time management - will there be time synchronization in RTI?
- How to incorporate CGF protocol in the FOM
  - CGF protocol to use prototype DIS PDUs on LAN
  - Hierarchy of FOMs (multiple federations)
  - Load RTI with FOM subsets
  - All-in-one “Super FOM”
- Multiple errors in RTI documentation
  - New version not released yet
  - Need to develop a problem report history
- Will there be documentation or training for RTI v0.2?
- Performance Test Team Outputs?
  - Issues are being summarized and posted
  - Will meet with the performance test team
- Test Working Group Outputs?
- 2 of 4 federates do not have target platform versions of RTI software
- RTI support for Ada?
- RTI has not dealt with voice and data communications

## PPF LESSONS LEARNED TO DATE

### Estimated Costs:

- Each federate tasked to define metrics/measures that they can contribute to the cost/benefit analysis
  - Legacy vs new starts
  - Development approaches (architecture, translators...)
  - H/W; S/W; LOC
  - Common S/W for federation